

with a pleuroperitoneal injection of a dilute solution of sodium pentobarbital, fixed in 10% formalin for two days, and then preserved in 70% ethanol for permanent storage.

In a recent re-examination of this particular lizard subsample, the unusual female (SET 2867) along with two other specimens (SET 2862 and 2865) were retagged as ASUMZ 33743 and ASUMZ 33741–33742, respectively (Fig. 1). The dorsal color pattern in ASUMZ 33743 (SVL = 67 mm; incomplete tail) corresponded well with the description of the Nebraska variant female (Trauth et al., *op. cit.*); i.e., there was an absence of the green suffusion on the head and anterior body, which is typically present in adult males and females of *A. s. viridis* (Fig. 1A). Also, the striping pattern (ventral to dorsal) of ASUMZ 33743 matched well with that of ASUMZ 33235 (pair of barely visible ventrolaterals, three pairs of primary stripes, and a secondary vertebral stripe). The striking ground color, apparent between the stripes (termed fields), consisted of shades of dark brown (Fig. 1A) rather than the hues of green suffusions on tan or light brown characteristic of normal adult males and females of *A. s. viridis* (Trauth et al., *op. cit.*). A dusky black pigmentation, also present in the scalation of the thoracic and abdominal surfaces of ASUMZ 33743 coincided with the ventral distribution of pigmentation on the entire venter of ASUMZ 33235. Data for the following meristic variables in ASUMZ 33743 were also within the range of variation for *A. s. viridis* from Arkansas (Trauth 1980, *op. cit.*; JMW, unpubl.): granules = scales around midbody, 83; granules from occipital scales to first row of caudal scales, 211; granules between the paravertebral stripes, 17; femoral pores, 15 left/16 right; subdigital lamellae of longest digit of each pes, 25 left/25 right; circumorbital scales series on each side, 4 left/5 right; and lateral supraocular granules, 16 left/14 right. Finally, enlarged yolked ovarian follicles were possessed by ASUMZ 33743: 1 left/2 right.

A typical preserved adult female from the subsample collected near the Sharp County site had an immaculate all white ventral surface (Fig. 1B). A male (ASUMZ 33742) collected along with the color variant from the Sharp County site also had a predominantly white venter with evidence of faint hues of blue laterally in the thoracic and abdominal region (Fig. 2B). In addition, ASUMZ 33743 had a dusky black chin and throat similar to Nebraska color variant, a feature that has not been observed in the normal color pattern of any other species in the *A. sexlineatus* species group in the United States.

The extreme dorsal and ventral color patterns of ASUMZ 33235 and 33743 were combined with normal features of both scutellation and meristic variables for this species. In both specimens, the mesoptychial scales bordering the gular fold were abruptly enlarged, and the postantebrachial scales on the posterior aspects of the forearms were only slightly enlarged from granular size. Although the causation of the extreme color pattern variation in ASUMZ 33235 and 33743 cannot be ascertained, there are only two possible explanations for its common existence. Either it was the product of a rare non-genetic developmental anomaly, from which normally patterned offspring would be expected, or it is the result of one or more mutations, from which the aberrant pattern could be perpetuated in future generations had reproduction occurred.

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AURIVELA LONGICAUDA (Long-tailed Whiptail). PREDATION.

Arthropods are potential predators of smaller reptiles and amphibians, with numerous reports in the literature (Armas 2000. Rev. Iber. Aracnol. 3:87–88; Barbo et al. 2009. Herpetol. Notes 2:99–100; Bauer 1990. Herpetol. Rev. 21:83–87; Jehle et al. 1996. Herpetozoa 9:157–159; Manzanilla et al., 2008. Bol. Soc. Entomol. Aragon 42:317–319; McCormick and Polis 1982. Biol. Rev. 57:29–58). In particular, spiders are known to capture and consume vertebrates (including rodents, birds, frogs, snakes, and lizards) both in webs (Cokendolpher 1978. J. Aracnol. 5:184; Groves and Groves 1978. Bull. Maryland Herpetol. Soc. 14:44–46; König 1987. Herpetofauna 9:6–8; Neill 1948. Herpetologica 28:200), and in the case of terrestrial species, directly on the ground or in burrows. *Lycosa poliostrata* (Araneomorphae) is a spider distributed in Brazil, Paraguay, Uruguay, and Argentina. Several authors have made various contributions on the biology of the species (Bertka 1880. Mém. Cour. Acad. Belg. 43:1–120; Boeris 1889. Atti. Soc. Nat. Modena, Mem. 8:123–135; Capocasale 1971. Rev. Brasil. Biol. 31:367–370); however, there are still uncertainties about taxonomy, distribution, and habits.

On 9 October 2015, during the course of an investigation to monitor herpetofauna at Monte-Chaco (30.7306°S, 67.4859°W; 3331 m elev.) in La Majadita, Valle Fértil, San Juan, Argentina, we found an adult *L. poliostrata* feeding on an adult male *Aurivela longicauda* inside a pit-fall trap (Fig. 1). The lizard, which had a length of 47.1 mm, exhibited a right dorsolateral injury. The collected spider and lizard were deposited in the Museo de Ciencias Naturales de la Universidad Nacional de San Juan (UNSJ) (*Lycosa polyostoma*), and in the Herpetological Collection of the UNSJ (UNSJ-2258), respectively. Although it is possible that the lizard died before the spider began consuming it, this is unlikely because spiders tend to prey upon live prey.

Although there are many reports of *Lycosa* preying upon toads (McCormick and Polis, *op. cit.*; Owen and Johnson 1997. Herpetol. Rev. 28:200), there is just one report of wolf spiders preying upon lizards (Maffei et al. 2010. Herpetol. Notes 3:167–170); our case is the second documented predation on lizards by *Lycosa*. Furthermore, even though there are previous records on predator-prey interactions between spiders and lizards, this is the first documented record of the predation of *A. longicauda* by an arachnid.

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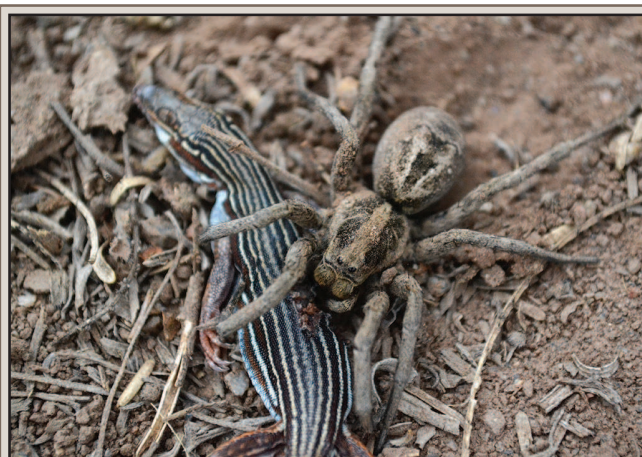


Fig. 1. *Lycosa poliostrata* preying upon an adult male *Aurivela longicauda*.

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BUNOPUS BLANFORDII (Blanford's Rock Gecko).

REPRODUCTION. *Bunopus blanfordii* occurs in Israel and Jordan (Uetz et al. 2017. The Reptile Database. <http://www.reptile-database.org>, accessed 4 April 2017). The status of *B. blanfordii* remains unclear and it may be conspecific with *Bunopus tuberculatus*. However, until further study, *B. blanfordii* is considered valid (Bauer et al. 2013. Zootaxa 3599:301–324). Bar and Haimovitch (2011. A Field Guide to Reptiles and Amphibians of Israel. Pazbar Ltd, Herzliya, Israel. 245 pp.) reported multiple clutches of two eggs were laid each year by *B. blanfordii* (as *B. tuberculatus*) in Israel. In this note we present additional information on the reproductive cycle of *B. blanfordii* from Israel based on a histological examination of museum specimens.

The gonads of 16 adults of *B. blanfordii* consisting of nine males (mean SVL = 40.3 mm \pm 5.9 SD, range = 28–47 mm) and seven females (mean SVL = 46.6 mm \pm 5.9 SD, range = 38–53 mm) from Israel deposited in the Steinhardt Museum of Natural History (TAUM), Tel Aviv University were histologically examined. These were all from the Arava Valley Region: TAUM 573, 1278, 1802, 1803, 1809, 1810, 2189, 2190, 2225, 2233, 3345, 5089, 5090, 10021, 10929, 13002. *Bunopus blanfordii* were collected 1950 to 1985. The lower part of the body cavity was opened and the left testis or ovary was removed. Histological sections were cut at 5 μ m and stained by Harris hematoxylin followed by eosin counterstain. Histology slides were deposited at TAUM.

Two stages were present in the *B. blanfordii* testis cycle: 1) Spermiogenesis, in which the seminiferous tubules are bordered by sperm or clusters of metamorphosing spermatids; 2) Regressed, germinal epithelium within the seminiferous tubules is reduced to a few layers of spermatogonia and interspersed Sertoli cells. Males in spermiogenesis were by month: March (N = 1), April (N = 5), May (N = 1), July (N = 1). The one October male had a regressed testis. The smallest reproductively active male (TAUM 3345) measured only 28 mm SVL and was collected in April. The rate of sperm production in this small male was not as high as seen in testes of larger males in which the inner border of each seminiferous tubule was lined by sperm or metamorphosing spermatids. Nevertheless, there was at least one cluster of sperm in virtually all seminiferous tubules of TAUM 3345.

Two stages were present in the ovarian cycle of *B. blanfordii*: 1) Quiescent, no yolk deposition was present: April (N = 2), May (N = 1), October (N = 1), November (N = 2); 2) Oviductal eggs, two were present in TAUM 1810 (SVL = 52 mm), collected in April. In view of our small female sample (N = 7) we did not report a minimum size for female reproductive activity.

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CRYPTOBLEPHARUS BUCHANANII (Fence Skink). BEE HOTELS AS RESOURCES. Bee or insect hotels, also known as bee condos or, in the scientific literature, “trap nests,” are installed as a resource to encourage cavity-nesting hymenopterans to nest.

Not only are bee hotels useful for scientific purposes for monitoring species diversity, abundance, and reproductive output of native bees and their natural enemies, but the installation of these hotels can boost bee numbers given that nest sites are often limiting (e.g., Torné-Noguera et al. 2014. PLoS ONE 9: e97255). Adult female bees gather food provisions for the offspring, deposit the provisions in the cavity, and then lay eggs. Typically a number of cells, each containing one food provision with an egg, are laid, the number being dependent on the species and the depth of the tube.

Despite good intentions, many bee hotels are not designed by bee scientists, and the proliferation of bee hotels being sold in various gardening venues have questionable value for supporting their intended occupants. For example, given that most cavity-nesting bees are smaller than honeybees, holes of diameters larger than 10 mm are unlikely to be occupied by bees (Prendergast, unpubl. data). This does not mean, however, that they are useless and will remain barren, as we describe below.

These observations occurred at a commercially manufactured bee hotel located on a tree at about 1 m high in the corner of a vegetable garden near the outdoor eating area of the Kings Park Biodiversity and Conservation Centre in Kings Park Botanic Gardens, Western Australia (31.57210°S, 115.59345°E).

Cryptoblepharus buchananii (SVL 45 mm) are common lizards endemic to Western Australia, with a distribution concentrated in the southwest region. On 26 May 2017 at about midday, two *C. buchananii* were observed, one occupying a large (approx. 2-cm diameter) bamboo tube, the other occupying a crevice between bamboo tubes that were part of a bee hotel. Both had partly emerged, and appeared to be basking, apparently taking advantage of the safety the crevices provided. A second observation occurred on 20 June 2017. One *C. buchananii* was observed basking, with almost half of its body protruding from one of the largest bamboo tubes. When approached, rather than flee, it retreated back into the end of the tube and curled up, suggesting that *C. buchananii* was using the bamboo tube as a refuge. A few hours later, the bee hotel was checked again and a *C. buchananii*, presumably the same one, was still present, but had moved into a crack at the bottom of the hotel between two bamboo tubes. A third observation on 26 June 2017 revealed three *C. buchananii* at the bee hotel (Fig 1.)

The recorded daily temperature extremes at the time of the first observation were 19°C/8°C and 22°C/8°C for the two following observations. Under cooler winter temperatures the



FIG. 1. *Cryptoblepharus buchananii* using a bee hotel for shelter (left); three *C. buchananii* using both bamboo tubes and cracks between them at the same bee hotel (right).